

FIG. 1

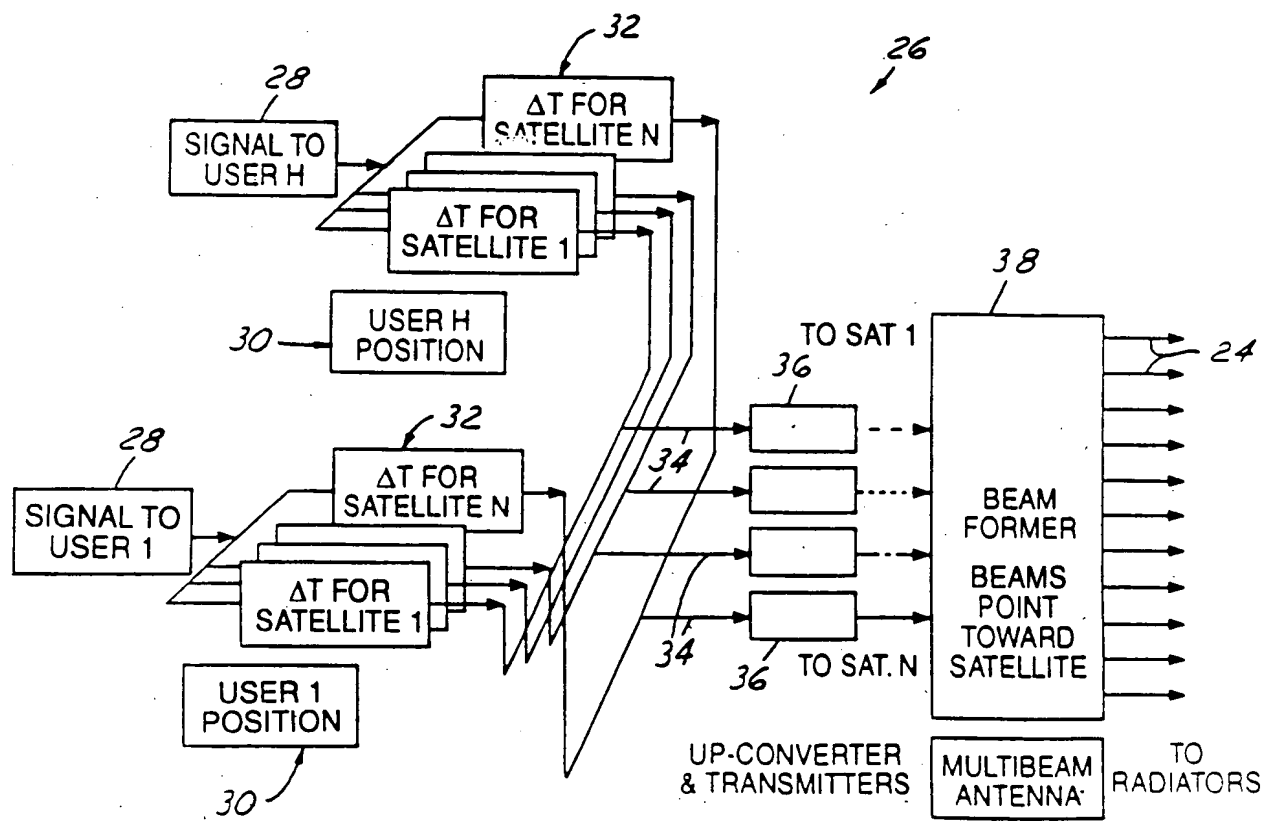


FIG. 2

The diagram illustrates a multi-user communication system. On the left, a group of rectangular boxes labeled 'RECEIVE PROCESSING CENTERS' is connected to a central point labeled '12'. From this point, multiple lines radiate outwards to a series of circular nodes labeled '10'. These nodes are connected to a series of rectangular nodes labeled '14'. The nodes '14' are further connected to a group of rectangular nodes labeled '18', which are identified as 'USERS'. The connections between the processing centers and the nodes are shown as solid lines, while the connections between the nodes and the users are shown as dashed lines. The entire system is enclosed within a dashed rectangular boundary.

**FIG. 3**

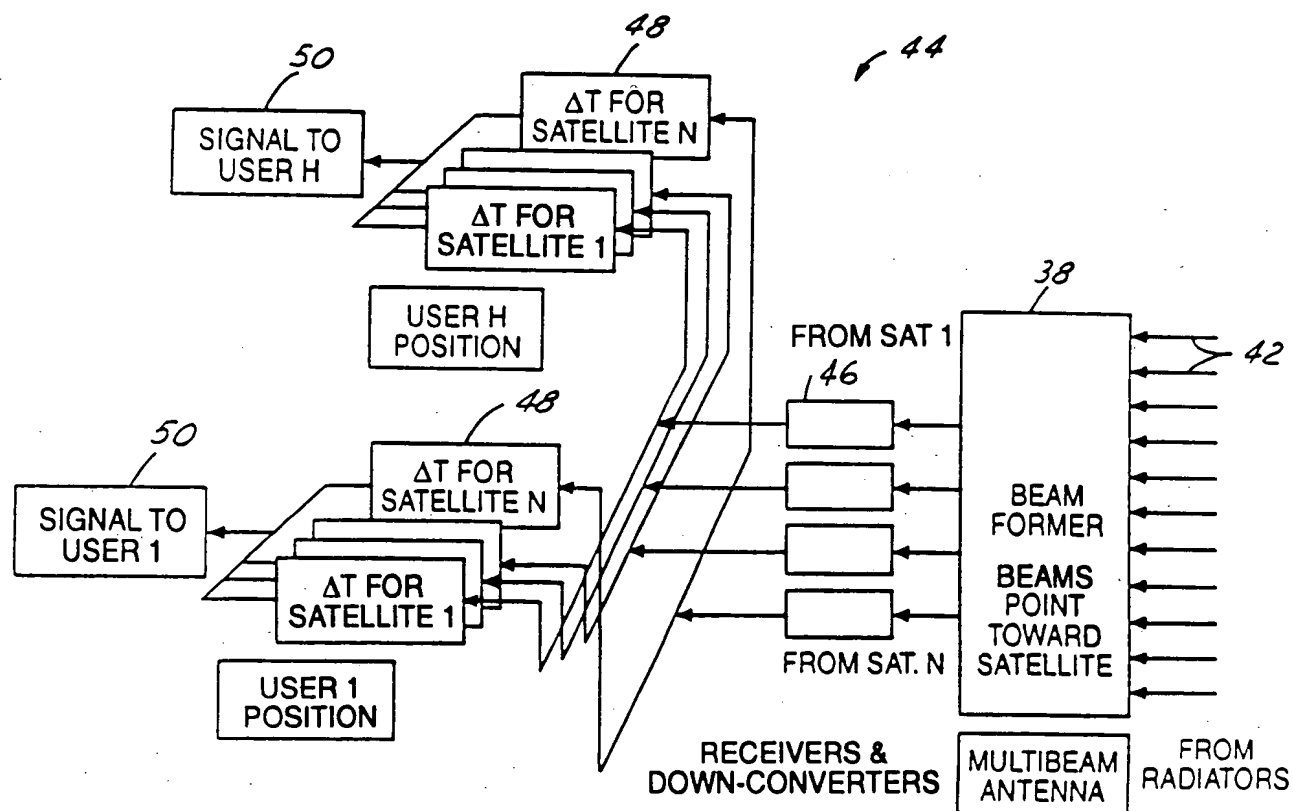


FIG. 4

HUB SEGMENT

# PATH DIFFERENTIAL USER POSITIONING

► PRE-PROCESSING  
FWD BEAMFORMING

HUB  
PROCESSING

## POST PROCESSING RTN BEAMFORMING

## CALIBRATION & TRACKING

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SPACE SEGMENT

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USER SEGMENT

## SATELLITES

USERS

FIG. 5

